CLAIMS

1. A cathode material for a lithium battery, said cathode material comprising, on a weight basis:

a first component which is an oxide or a sulfide of a metal, said first component being capable of intercalating lithium, said first component being present in an amount which is greater than 20%, and up to 80%;

a second component which comprises carbon, said second component being an electroactive catalyst which is capable of reducing oxygen, said second component being present in an amount of 10-80%; and

a binder which is present in an amount of 5-40%.

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- 2. The cathode material of claim 1, wherein said first component comprises at least 30% of said cathode.
- 3. The cathode material of claim 1, wherein said second component is present in an amount of at least 10%, and no more than 30%.
- 4. The cathode material of claim 1, wherein said first component is selected from the group consisting of: MnO₂, CoO₂, NiO₂, LiCoO₂, LiMn₂O₄, LiNiO₂, MoS₂, TiS₂, and combinations thereof.

- 5. The cathode material of claim 1, wherein said second component comprises high surface area carbon.
- 6. The cathode material of claim 5, wherein said high surface area carbon comprises carbon black.
- 7. The cathode material of claim 1, wherein said binder comprises a fluoropolymer.
- 8. The cathode material of claim 1, wherein said first component comprises MnO₂.
- 9. The cathode material of claim 1, wherein said first component comprises 35-45% MnO₂, said second component comprises 22-28% carbon, and said binder comprises 30-40% of a fluoropolymer.
- 10. The cathode material of claim 1, wherein said first component comprises 41% MnO₂, said second component comprises 25% carbon black, and said third component comprises 34% of a fluoropolymer.

- 11. The cathode material of claim 1, wherein said first component comprises 40% MnO₂, said second component comprises 50% carbon black, and said third component comprises 10% polytetrafluoroethylene.
- 12. The cathode material of claim 1, wherein said first component is present in an amount of 20-60%, said second component is present in an amount of 30-70%, and said binder is present in an amount of 5-15%.
 - 13. A lithium battery which includes the cathode material of claim 1.
- 14. A cathode material for a metal-air battery, said cathode material comprising, on a weight basis:
- a first component which is capable of intercalating a metal, said first component being present in an amount which is greater than 20%, and up to 80% of said material;
- a second component which comprises an electroactive catalyst which is capable of catalyzing the reduction of oxygen, said second component comprises 10-80% of said material; and
 - a binder comprising 5-40% of said material.

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